



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0426; Directorate Identifier 2013-NM-231-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 767 and 777 airplanes. This proposed AD was prompted by reports of uncommanded door closure of the large lower lobe cargo door. This proposed AD would require inspecting for part numbers and serial numbers of the rotary actuators of the large forward and aft lower lobe cargo doors, as applicable, and corrective action if necessary. We are proposing this AD to detect and correct rotary actuators made with a material having poor actuator gear wear characteristics, which could result in failure of the rotary actuators for the large forward or aft lower lobe cargo door and subsequent uncommanded door closure, which could possibly result in injury to people on the ground.

DATES: We must receive comments on this proposed AD by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Boeing service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. For Eaton service information identified in this proposed AD, contact Eaton Corporation, Aerospace Operations, 3 Park Plaza, Suite 1200, Irvine, CA 92614; telephone 949-253-2100; fax 949-253-2111; Internet <http://www.eaton.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0426; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Susan Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6457; fax: 425-917-6590; email: susan.l.monroe@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2014-0426; Directorate Identifier 2013-NM-231-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received reports of uncommanded door closure of the large lower lobe cargo door. One incident occurred while the door was being opened, a second one while the door was stationary in the open position, and the third incident occurred as the door was being closed. It was determined that all of the doors’ rotary actuators had failed (two actuators per door). The three incidents occurred on Model 767 airplanes, but the same rotary actuator part numbers are also used on the large lower lobe cargo doors installed on the Model 777 airplanes. Examination of five of the failed rotary actuators found significant wear in the gear box and failure of the first stage input sun gear set. The sixth failed rotary actuator had a failed third-stage input sun gear from an overload condition. All three affected airplanes had between 12,500 and 13,500 total flight cycles. The failed actuators were manufactured with Nitalloy 135M steel between August 1994 and December 2000. Actuators manufactured before or after that timeframe were made with

9310 steel. The rotary actuators made from 9310 steel material are considered safe. This condition, if not corrected, could result in failure of the rotary actuators for the large lower lobe cargo door, and subsequent uncommanded door closures, which could possibly result in injury to people on the ground.

Relevant Service Information

We reviewed Boeing Service Bulletins 767-52A0100, Revision 2, dated September 26, 2013; and 777-52-0053, Revision 1, dated September 26, 2013. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0426.

Boeing Service Bulletins 767-52A0100, Revision 2, dated September 26, 2013; and 777-52-0053, Revision 1, dated September 26, 2013; refer to Eaton Service Bulletin 692D100-52-4, Revision 2, dated August 1, 2013, which provides serial number information and certain corrective actions (rework of certain rotary actuators or reidentification of certain other rotary actuators).

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements

This proposed AD would require inspecting for part numbers and serial numbers of the rotary actuators of the large forward and aft lower lobe cargo doors, as applicable, and corrective actions if necessary, as specified in the service information described previously.

The phrase "corrective actions" is used in this proposed AD. "Corrective actions" are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

Costs of Compliance

We estimate that this proposed AD affects 510 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection for part number and serial number	1 work-hour X \$85 per hour = \$85	None	\$85	\$43,350

We estimate the following costs to do any necessary re-identification or replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these re-identifications or replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Re-identification	Up to 1 work-hour X \$85 per hour = \$85	\$1	Up to \$86
Replacement	Up to 9 work-hours X \$85 per hour = \$765	\$19,700	Up to \$20,465

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2014-0426; Directorate Identifier 2013-NM-231-AD.

(a) Comments Due Date

We must receive comments by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register]**.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Model 767-200, -300, -300F, and -400ER series airplanes, as identified in Boeing Service Bulletin 767-52A0100, Revision 2, dated September 26, 2013.

(2) Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, as identified in Boeing Service Bulletin 777-52-0053, Revision 1, dated September 26, 2013.

(d) Subject

Air Transport Association (ATA) of America Code 52, Doors.

(e) Unsafe Condition

This AD was prompted by reports of uncommanded door closure of the large lower lobe cargo door. We are issuing this AD to detect and correct rotary actuators made with a material having poor wear characteristics, which could result in failure of the rotary actuators for the large forward or aft lower lobe cargo door and subsequent

uncommanded door closure, which could possibly result in injury to people on the ground.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection for Part Numbers, and Re-identification or Replacement, for Model 767 Airplanes

For Model 767-200, -300, -300F, and -400ER series airplanes: Within 30 months after the effective date of this AD, inspect each rotary actuator installed in the forward and aft large lower lobe cargo doors, as applicable, to determine the part number and serial number, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-52A0100, Revision 2, dated September 26, 2013; and Eaton Service Bulletin 692D100-52-4, Revision 2, dated August 1, 2013. Do the applicable corrective actions at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767-52A0100, Revision 2, dated September 26, 2013, except as required by paragraph (i) of this AD. A review of maintenance records for the part number and serial number is acceptable in lieu of the inspection if the part and serial numbers of the rotary actuator can be conclusively determined from that review.

(h) Inspection for Part Numbers, and Re-identification or Replacement, for Model 777 Airplanes

For Model 777-200, -200LR, -300, -300ER, and 777F series airplanes: Within 72 months after the effective date of this AD, inspect each rotary actuator installed in the forward and aft large lower lobe cargo doors, as applicable, to determine the part number and serial number, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-52-0053, Revision 1, dated September 26, 2013; and Eaton Service Bulletin 692D100-52-4, Revision 2, dated August 1, 2013. Do the applicable corrective actions at the applicable time specified in

paragraph 1.E., “Compliance,” of Boeing Service Bulletin 777-52-0053, Revision 1, dated September 26, 2013, except as required by paragraph (i) of this AD. A review of maintenance records for the part number and serial number is acceptable in lieu of the inspection if the part and serial numbers of the rotary actuator can be conclusively determined from that review.

(i) Exception to the Service Information

Where Boeing Service Bulletin 767-52A0100, Revision 2, dated September 26, 2013; and Boeing Service Bulletin 777-52-0053, Revision 1, dated September 26, 2013, specify a compliance time after the issue date “of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(j) Parts Installation Prohibition

As of the effective date of this AD, no rotary actuator having Boeing part number S135W132-3 (supplier part number 692D100-13) may be installed on any airplane.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes

Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane , and the approval must specifically refer to this AD.

(I) Related Information

(1) For more information about this AD, contact Susan Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6457; fax: 425-917-6590; email: susan.l.monroe@faa.gov.

(2) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. For Eaton service information identified in this AD, contact Eaton Corporation, Aerospace Operations, 3 Park Plaza, Suite 1200, Irvine, CA 92614; telephone 949-253-2100; fax 949-253-2111; Internet <http://www.eaton.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on June 19, 2014.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

BILLING CODE 4910-13-P

[FR Doc. 2014-15250 Filed 06/27/2014 at 8:45 am; Publication Date: 06/30/2014]